

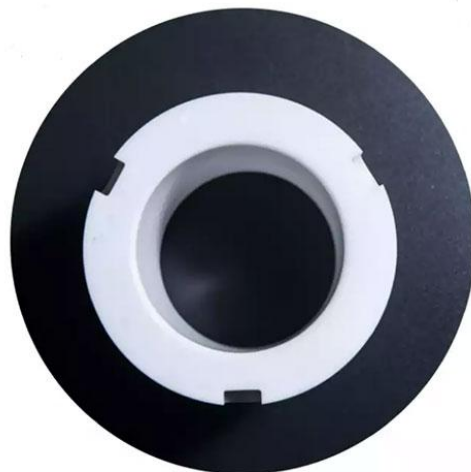
Zirconia Toughened Alumina Ceramic Seal Ring

You can rest assured to buy Nextgen Zirconia Toughened Alumina Ceramic Seal Ring from our factory. ZTA Seal Ring has higher flexural strength and fracture toughness, and excellent wear resistance. Nextgen Advanced Materials supplies ZTA Seal Rings with high quality and fast delivery, and customized products area also available.

Product Description

Nextgen Advanced Materials INC is a professional leader Zirconia Toughened Alumina Ceramic Seal Ring manufacturer with high quality and reasonable price. We always feel that all success of our company is directly related to the quality of the products we offer. Zirconia Toughened Alumina Ceramics (referred to as composite ceramics, ZTA) has the characteristics of whiteness, corrosion resistance, and good chemical stability.

Alumina has a high hardness and the toughness of zirconia is good. The two materials form an excellent composite of high strength and high toughness, and the application is more widely used. ZTA ceramic has higher flexural strength and fracture toughness at normal temperature, so zirconia toughened ceramics have excellent wear resistance. The specific ratio of the two materials can be adjusted according to the actual use requirements of the user. The performance of zirconia toughened alumina ceramics is better than that of 99 alumina ceramics, and the price is much lower than that of zirconia ceramics; many alumina ceramics are not suitable for the occasion, which shows better cost performance than zirconia ceramics.



Specification of ZTA Seal Rings				
		Condition	Unit	ZTA Substrate
				ZTA
Material		-	-	Al ₂ O ₃ /ZrO ₂
Color		-	-	White
Bulk Density		-	g/cm ³	4
Surface Roughness Ra		-	μm	0.2
Reflectivity		0.3-0.4mmt	%	80
		0.8-1.0mmt		90
Mechanical	Bending Strength	3-point method	MPa	700
	Modulus of Elasticity	-	GPa	310
	Vickers Hardness	-	GPa	15
	Fracture Toughness	IF method	MPa·m ^{1/2}	3.5
Thermal	Coefficient of Thermal Expansion	40-400°C	10-6/K	7.1
		40-800°C		8
	Thermal Conductivity	25°C	W/(m·K)	27
		300°C		16
Specific Heat	25°C	J/(kg·K)	720	
Electrical	Dielectric Constant	1MHz	-	10.2
	Dielectric Loss Factor	1MHz	10-3	0.2
	Volume Resistivity	25°C	Ω·cm	>10 ¹⁴
	Breakdown Strength	DC	kV/mm	>15